



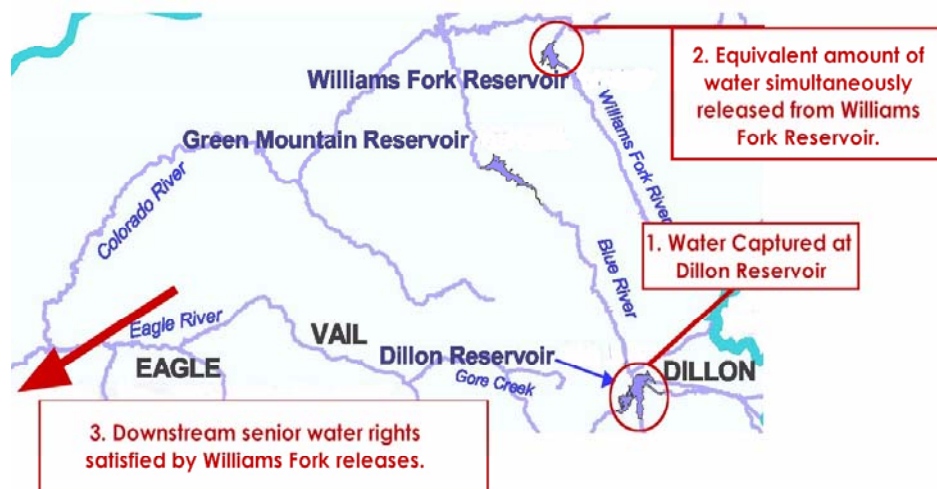
AN EDUCATIONAL SERVICE OF THE  
COLORADO RIVER WATER CONSERVATION DISTRICT

## Exchanges and Substitutions

On the surface, Colorado's "first in time, first in right" water rights system might appear rigid and inflexible. In times of shortage, older senior water rights are allocated scarce water resources first and more recent junior water rights may have to go without water. There are creative solutions, however, that give flexibility to water managers to remedy water supply problems and two of these solutions are exchanges and substitutions.

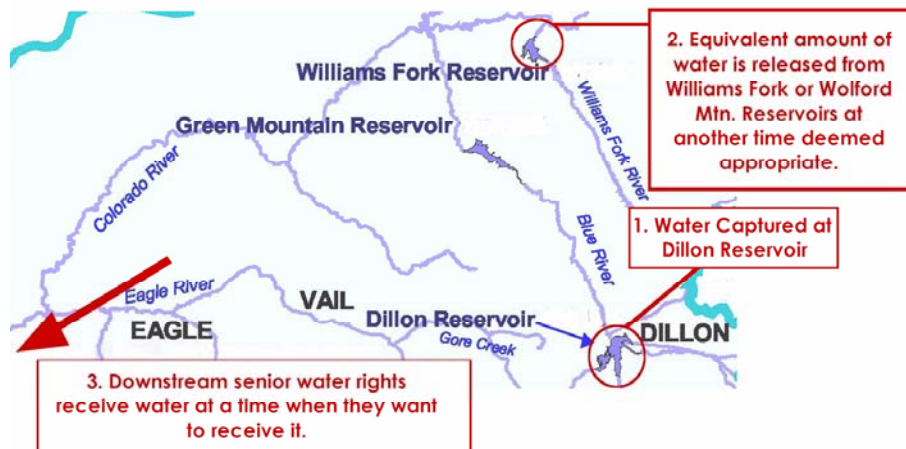
Exchanges and substitutions are arrangements where a junior water right can capture water that it otherwise would not be permitted to divert or store because it provides an alternative supply of water to the senior water rights whose priority would have prevented the water diversion. This alternative water supply can come from a tributary stream or a reservoir upstream of the senior rights. The junior water right can buy, lease, trade or make other arrangements to secure the alternative source of supply.

Exchanges are arrangements where the capture of water by the junior right and the provision of an alternative supply happen at the same time to make the diversion invisible to the downstream senior water rights.



**Example of an exchange.**

Substitutions do not have a simultaneous provision of water to the senior rights, instead the alternative supply of water is provided at another time that is beneficial to the senior right, such as during a time of year when river flows are typically low.



**Example of a substitution.**

Both of these arrangements have to be approved by either a water court judge or the State Engineer and they must not “injure”, or cause a shortage of water to, any other water right that would have received water without the exchange or substitution occurring.

Exchanges and substitutions are often done between reservoirs when water can be captured at a more convenient point in exchange for release of water from another reservoir.

Williams Fork Reservoir, for instance, is a reservoir in Grand County near the headwaters of the Colorado River that serves solely to provide exchange and substitution water for Denver Water. Release of water from Williams Fork covers the out-of-priority diversions of water from either Denver Water’s Moffat collection system on the Fraser River or Dillon Reservoir on the Blue River, making these diversions transparent to downstream senior water rights.

Exchanges and substitutions occur throughout the Colorado River Basin of the mainstem Colorado, Yampa, Eagle, Blue, Gunnison and Roaring Fork rivers.

For more information about current exchanges, substitutions and other water policy issues, log onto [www.crwcd.gov](http://www.crwcd.gov) for more information.